

# ISSUES AND CHALLENGES OF UTILISATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) RESOURCES IN FEDERAL UNIVERSITY LIBRARIES IN SOUTH-SOUTH, NIGERIA

**Ufuoma ERUWE**

*Head of Reprographic Unit,  
The Library Federal University of Petroleum Resources, Library  
Email: [eromoserecon@yahoo.com](mailto:eromoserecon@yahoo.com)*

**Atanda Saliu SAMBO**

*Head of Technical Service Division,  
Federal University of Petroleum Resources, Library  
Delta State  
Tel: 08038560334  
Email: [atsalsam2006@yahoo.com](mailto:atsalsam2006@yahoo.com)*

and

**Esther Omoanono ADUDU**

*Senior Library Officer,  
College of Education Library, Agbor Delta State.*

## **Abstract**

*This study provides an overview on issues and challenges of utilization of information and communication technology resources in federal university libraries in South- South Nigeria. In carrying out this study three research questions were posed A descriptive design was used for the study. The population of the study comprises of 108 librarians. 108 Questionnaires was distributed and 93(86%) were completed and returned. Observation checklist was also used to verify the ICT resources available in the libraries under study. In analyzing the data obtained, frequency counts, simple percentage, and mean score were used as the statistical methods. The major findings of the study revealed that fax (facsimile), projector screen and digital camera were not available out of others ICT resources available in the libraries. Challenges identified includes lack of ICT skills, economic barriers(fund), inadequate space to accommodate many users, poor power supply, in adequate ICT resources, lack of functional ICT policy, inadequate time for its users and attitude of the library staff in ICT section. Besides, many strategies were suggested to enhance maximum use of these resources. Based on the findings, it was recommended that available ICT resources should be accessible to users, power supply should be improved upon; regular ICT programmes should be organized for the library staff; provision of adequate ICT resources, adequate fund should be provided, and more structures should be put in place to accommodate more users.*

**Keywords:** *Issues, Challenges; Utilization, Information; Communication; Technology (ICT); University Libraries; South-South, Nigeria*

## **Introduction**

The university library has a prominent role to play in supporting higher education to fulfill objectives of its parent institution. Students in higher education are to be provided with the facilities necessary for mastering the subject matter, techniques, skills, habits of thought, and methods of work in their chosen field. Classroom

instructions alone will not provide all the opportunities needed for attaining all these complex educational objectives. It is here that libraries come to help students. The university library is a collection of sources, services and the building in which it is housed. It provides access to various resources in order to support teaching, learning and research activities (Vishala & Bhandi, 2009).

The conception of the library as a store house of knowledge by some writers has greatly been altered by trends in the Information, Communication Technology (ICT) fields; much emphasis is placed on access (Omekwu & Eruvwe, 2014). Anaeme (2006), highlighted that the emerging and fast growing ICT application in libraries especially academic libraries have continued to revolutionaries the pattern and scope of library service. Nwachukwu (2006) in Omekwu & Eruvwe (2014) studied utilization of computer technologies in Federal University Libraries and discovered that, there is dearth of computer facilities in federal university libraries in Nigeria; the computer technologies available are not adequately utilized; these technologies were not effectively applied in essential library operations; the university library staff members possess poor computer skills. In another development, Gbaje (2007) observes that erratic nature of electricity supply will not support the successful implementation and maintenance of a virtual library. Again, the problem of inadequate ICT resources is rated as a great problem which is in line with Okiy (2005), Edom (2007), Ogunbote and Odunewu (2009), this may be as a result of inadequate fund.

However, university librarians should try as much as possible to curb these challenges by selling positive ideas to the parent body of the university as well as donor that will be of positive influence to the university libraries in order to achieve its aims/objectives.

### **Statement of the Problem**

Utilization of information and communication technology has assisted library professionals to provide value added quality information service and give more remote access to the internationally available information resources. Today's highly sophisticated information technology to facilitate the storage of huge amounts of data or information in a very compact space. Information technologies promise fast retrieval of stored information and revolutionize our concept of the functions of a traditional library and a modern information center. Recently technological developments have dramatically changed the mode of library operations and services. Yet the challenges of utilization of ICT such as lack of skill personnel, lack of space, financial constraints, with a particular reference to federal university libraries in south-south Nigeria seems to have been unexplored. It is as a result of these challenges that prompted the researcher to embark on this research in other to unravel the challenges of utilization of ICT resources in federal university libraries in south-south Nigeria.

### **Objectives of the Study**

1. To identify available ICT resources in the Federal University Libraries in South-South, Nigeria
2. To discover challenges associated with the use of ICT resources in the libraries under study

3. To examine strategies could be used for the enhancement of ICT resources use among librarians in the study under review
4. The following research questions guided the study:

### **Research questions**

1. What are the ICT resources available in the Federal University Libraries in South-South, Nigeria?
2. What are the issues and challenges associated with the use of ICT resources in the libraries under study?
3. What strategies could be used for the enhancement of ICT resources use among librarians in the study under review?

### **Literature Review**

The utilization of Information and communication technology (ICT) resources in university libraries cannot be over-emphasized. It is increasingly becoming a dominant feature in many libraries. The introduction of ICT into university libraries has resulted in improved academic library service delivery (Chisenga 2004). ICT applications in university libraries include computers, Internet-based facilities, printers, laminators, faxes and photocopiers etc. As a result of these, academic library services such as circulation, reference, interlibrary loans and information services are being rendered more efficiently, timely and accurately – all of which is obviously to the benefit of library users Mamafha (2013). The availability of computers, the Internet-based World Wide Web (WWW) and email services in academic libraries has undoubtedly improved the way in which people, in particular library users, communicate with the rest of the world and apply for jobs.

Similarly, Nwachukwu (2004) opined that information and communication technology (ICTs) is the application of computers and other technologies to the acquisition, organization, storage, retrieval and dissemination of information. However, in this context, information and communication technology is the use of electronic devices such as computers, telephones, internet, satellite system, to store, retrieve and disseminate information in the form of data, text image and others. Academic libraries are experiencing greater improvements in the areas of teaching, learning, research and communities' activities. Iwu and Yusuf (2010) affirmed that 61.9% of students at Covenant University use OPACs to locate materials on the shelves. In a similar study by Ilo and Ifijeh (2010), 94% of final year students at Covenant University indicated that the internet had greater impact on their projects. Also, Nwezeh (2010) in a study on the use of ICT in Nigerian Universities finds that 78% of staff and 85% of students at Obafemi Awolowo University use the internet for their projects. Furthermore, Krubu and Osawaru's (2011) findings identified ICT resources and the use of the resources available at John Harris and Benson Idahosa University libraries as search engine, internet, CD-ROM, Online database, and World Wide Web. These resources are used to acquire, store, process, retrieve, and disseminate information. ICT has made it possible for Nigerian academic libraries to use the internet for search engines such as Yahoo, Google, and e-mail and to access online digital resources such as Amazon, Wikipedia etc.

### **Challenges affecting the utilization of ICT resources in Libraries**

Academic libraries in Africa do not enjoy the same information delivery methods like those in developed countries except those in Southern Africa. Chisenga and Rorissa (2001) point out the great disparity in the adoption and use of ICTs in academic libraries. Waiganjo (2006) writing from Kenya states that academic libraries in Kenya suffer poor funding, poor communication system and lack of ICT qualified librarians. The case is not different in Uganda. Magara (2002) pointed out that power unreliability, management attitude and poor ICT skill of the librarians; Adeya (2007 & 2002) writing from Botswana states that inadequate computerization, inadequate infrastructure and inadequate human capacity as the major challenges towards ICT use. Rosenberg (2005) eludes the challenges to ICT to lack of library software standardization. Okiy (2005) points out poor and inadequate telecommunication facilities; poor level of computer literacy, even within the academic community; poor level of computer facilities; poor level of awareness of Internet facilities among policy makers, government officials and the ruling class in general; and minimum involvement of academic institutions in network building in Africa as challenges militating against the use of ICTs. Low level of ICT skills; lack of functional ICT policy; economic barriers (funds); ICT infrastructure; resistance to change; low capacity of communication facility; absence of digital or electronic libraries except in South Africa; lack of policy for manpower development etc. are common barriers mentioned as factors undermining the use of ICTs. Gardner (1994) points out human resources, vendor and maintenance, culture, funding, education and training as key factors for ICT use in developing countries. According to him, unskilled and untrained human resources lead to the employment of expatriates and African governments cannot pay or sustain expatriates. Vendor's main concern is also making money without maintenance plan. Without adequate training, organizations may not be able to effectively use them.

### **Strategies to improve on the utilization of ICT in academic libraries**

There are lots to gain from utilization of ICT resources in academic libraries. There is no gain saying that fact that Nigeria came late into the ICT world (Okezie, 2009). The adoption of the Nigeria National Policy for Information Technology in 2001 is the right step towards ICT utilization. There is need for library staff and users to be knowledgeable in ICT. This would help improve the management and supervisory capabilities of the library administration. Okore (2005) opined that building a reservoir of ICT manpower and ICT infrastructures in our libraries are necessary. Oketunji (2000) supports a series of training and re-training programmes for all categories of library staff and user. Okore (2005) suggested that for library system as a whole, ICT knowledge should be expanded to create e-learning centre and also using e-library to deliver library services and make library resources available to the users. Besides, fund is very important in library services. Adeyemi (2004) suggested that academic libraries authorities should press for more fund from government and also look inward for alternative source of generating funds for procuring ICT equipment for the library in order to achieve the vision and mission of the library. On power supply, Abba (2005) suggested that since electricity power supply is central to the library, the government should endeavor to rise to the challenge of meeting this demand for improved stability

in its supply. In same view, alternative source of power outage since Power Holdings Company of Nigeria (PHCN) is not reliable with power supply. On the issue of lack of personnel, the library managers should recruit qualify hands who can man ICT equipment more effectively in order to achieve the aims and objectives of the library services. Lastly, Library managers should try as much as possible to procure the ICT equipment gradually if they cannot buy all at the same time. They should also procure the ones that are very important to the staff and users since it is very important to the library.

### Methodology

The study adopted a descriptive survey using questionnaire to collect data. A total of one hundred and eight (108) librarians from the federal university libraries in South-South Nigeria were used for the study. A total of 108 copies of the questionnaire were distributed and 93 (86%) copies of the questionnaire were retrieved. The data was analyzed using percentages, frequency table, and mean score and was used to answer the research question. For the responses, it was based on four (4)-point rating scale, a mid-point mean of 2.5 was used as positive response criterion mean and accepted as a positive response because the average of individual mean score was 2.5. For clarity, each item was presented in a table and all findings were presented as the table reveal.

**Table: 1: Population of the Study**

S/N	Name of the Library	Librarians
1	University of Benin Library(UNIBEN)	18
2	University of Calabar Library(UNICAR)	18
3	Federal University of Petroleum Resources, Library (FUPRE)	9
4	University of Portharcout Library (UNIPORT)	23
5	University of Uyo Library (UNI-UYO)	28
6	Federal University of Otuoke Library	12
	<b>Total</b>	<b>108</b>

Source: 2016/2017 Academic Session retrieved from the various University Libraries.

### Data Analysis and Presentation

As shown in the table 1 above, the populations of this study consist of 108 recruited librarians in the federal university libraries under study. The breakdown of the number of librarian's in the federal university libraries in south- south Nigeria is as follows: University of Benin library (18); University of Calabar library (18); Federal University of Petroleum Resources Effurun Library (9), University of Portharcout Library (23); University of Uyo (28); and Federal University Otuoke Library (12) respectively.

**Research question 1:** What are the ICT resources available in the federal university libraries in south - south, Nigeria?

**Table 2: Observation checklist of the ICT resources available in the libraries under study**

S/N	ICT RESOURCES AVAILABLE	AVAILABLE	NOT FUNCTIONAL	NOT AVAILABLE
1	Internet			
2	Computers			
3	Photocopiers			
4	Fax (Facsimile)			
5	Floppy diskettes			
6	Scanners			
7	CD-ROMS			
8	Video tape players			
9	Audio tape player			
10	Flash drives			
11	Projector screen			
12	Television			
13	Telephone			
14	Digital camera			
15	Printers			
16	Radio			
17	Microforms			

The results presented in table indicated that out of seventeen (17) ICT resources believed to be very indispensable to information generation and dissemination for teaching, learning and research in the federal university libraries in south - south, Nigeria, fourteen (14) are available while three (3) are not available. This is in line with the researcher's observation as contained in observation checklist.

**Research question 2:** What are the issues and challenges associated with the use of ICT resources in the libraries under study?

**Table 3: Issues and challenges associated with the use of ICT resources in the libraries under study**

S/N	Challenges Associated with the Use of ICT Resources	SA	A	D	SD	X	Decision
1	Poor Power Supply	40	39	10	4	3.2	Accepted
2	Lack of ICT skills	42	46	4	1	3.3	Accepted
3	No access to the ICT resources	4	16	40	33	1.9	Rejected
4	Inadequate ICT resources	43	34	14	2	3.2	Accepted
5	Inadequate time for its use	33	44	12	4	3.1	Accepted
6	Attitude of the library staff in ICT section	41	44	8	0	3.0	Accepted
7	Inadequate space to accommodate many users	38	43	9	3	3.2	Accepted
8	lack of functional ICT policy	32	47	12	2	3.1	Accepted
9	economic barriers (funds);	45	41	5	3	3.3	Accepted

The above table shows the mean responses of the library staff on the challenges associated with the use of ICT resources in the library. All items mentioned, eight (8) were positively rated as their means scores are greater than the criterion mean (2.5) while one (1) were negatively rated and is not accepted as a problem, and this one is No access to the ICT resources (1.9). Meanwhile, the problems are as follow in raking order; Lack of ICT skills (3.3), economic barriers (funds) (3.3), Inadequate space to accommodate many users (3.2), Poor Power Supply (3.2), Inadequate ICT resources (3.2), lack of functional ICT policy (3.1), inadequate time for its use (3.1) and Attitude of the library staff in ICT section (3.0) respectively. The overall indication is that many problems are associated with ICT resources use.

**Research question 3:** What strategies could be used for the enhancement of ICT resources use among librarians in the study under review?

**Table 4: Strategies could be used for the enhancement of ICT resources use**

S/N	Strategies for enhancing ICT Resources Use	VA	A	FA	IN	X	Decision
1	Improve power supply	34	44	13	2	3.1	Accepted
2	Staff trained and retraining on ICT use	34	46	12	1	3.2	Accepted
3	ICT awareness should be carried out by library management	23	49	10	11	2.9	Accepted
4	ICT should be accessible to all the user	35	39	12	8	3.1	Accepted
5	Adequate and functional ICT resources be made available	34	37	12	10	3.0	Accepted
6	Increase time image of ICT	36	36	14	7	3.0	Accepted
7	Adequate provision of space should be made to accommodate many users	35	45	10	3	3.2	Accepted
8	Library staff should adopt good behavior in helping the users	36	37	10	10	3.0	Accepted
9	Adequate fund should be provided to boost ICT activities in the library	45	33	11	4	3.2	Accepted

The above table shows that there are many strategies that could be adopted for the enhancement of the use of ICT resources among librarians. All nine (9) statements listed were positively rated and accepted as strategies to be adopted. This is because the item means score of each statement is greater than the criterion mean. These are the strategies in ranking order: Staff be trained on ICT use (3.2), Adequate provision of space should be made to accommodate many users (3.2), Adequate fund should be provided to boost ICT activities in the library (3.2), Improve power supply (3.1), ICT should be accessible to all the user (3.1), Adequate and functional ICT resources be made available (3.0), Increase time image of ICT (3.0) and ICT awareness should be carried out by library management (2.9). The researcher agreed that if all these strategies are implemented, maximum use of ICT is guaranteed.

**Conclusion**

The utilization of ICT resources in academic libraries is paramount to the research, reading, and teaching of both academic staff and the students. ICT have been proved to be an important (vital) tool for enhancing services in modern libraries. From the analysis and discussion of the findings, the researcher discovered that different types of ICT resources were available in the libraries under study. This research has also been able to identify the challenges with the use of ICT resources in the libraries under review as well as strategies to curb these challenges were also proffer.



## Recommendations

Based on the results obtained from the study, the following measures are recommended to enhance ICT resources use in the libraries: Improve power supply, or alternative power supply, staff be trained and retraining on ICT use, ICT awareness should be carried out by library management, ICT should be accessible to all the user, adequate and functional ICT resources be made available, increase time image of ICT, adequate provision of space should be made to accommodate many users, library staff should adopt good behavior in helping the users, as well as provision of adequate funds to enhance library development.

## References

- Abba, C. (2005). Use of ICT equipment among Library Staff in three Polytechnic libraries. *Journal of school science, Federal Polytechnic*. Bida 2(3):9-11
- Adeya, N.C. (2002). ICTs and Poverty: A Literature Review. UNESCO. Available: [http://www.idrc.ca/en/ev-24718-201-1-DO\\_TOPIC.html](http://www.idrc.ca/en/ev-24718-201-1-DO_TOPIC.html)
- Adeyemi, B. (2004). Problems and challenges of automating cataloguing process at Kenneth Dike Library, University of Ibadan, Nigeria. *African Journal of Library, Archives and Information Science*. 12(2), 213-222
- Anaeme, F.O. (2006). Information communication technology (ICT) intervention in library and information services. *Nigerian Library and Information Science trend*. Nigerian Library Association. Imo. 4(1&2), 27-36
- Chisenga J. (2004). The Use of ICTs in African public library services: a survey of tencountries in Anglophone Africa. Oxford: International Network for the Availability of Scientific Publications.
- Chisenga, J & Rorissa, A. (2001). Libraries and ICT: a review of global trends and the state of the art in Africa. Paper prepared for the second meeting of the (CODI), Addis Ababa, Ethiopia, 4-7 September.
- Edom, B.O. (2007). An Assessment of the problem of the use of ICT facilities in information sourcing and retrieved by the academic staff in Nigeria University. *The information technologist*: 4(2).P113-127.
- Gardner, B. (1994). *Ensuring Successful Information Technology Utilization in Developing Countries*. Garborone: Botswana (Pty) Limited, Botswana, 12-20.**
- Gbaje, B.K. (2007). Implementing a National Virtual Library for Higher Institutions in Nigeria. *Library and Information Science research electronic journal* 7(2)
- Ilo, P. I. & Ifijeh, G.I. (2010). Impact of the Internet on Final Year Students' Research: A Case Study of Covenant University, Ota, Nigeria. *Library Philosophy and Practice* (e journal). Paper 403. Available at: <http://digitalcommons.unl.edu/libphilprac/403>
- Iwu, J. & Yusuf, F. (2010). Use of Academic Library: A Case Study at Covenant University, Nigeria. Available at [www.white-clouds.com/iclc/cliej/cl30YI.pdf](http://www.white-clouds.com/iclc/cliej/cl30YI.pdf) (Accessed December 25, 2012).
- Krubu, D. E. & Osawaru, K.E. (2011). The Impact of Information and Communication (ICT) in Nigerian University. Available at [digitalcommons.unl.edu/cgi/viewcontent.cgi?article161&context=libphilprac](http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article161&context=libphilprac). (Accessed January 17, 2013)

- Magara, E. (2002) Application of digital libraries and electronic technologies in Uganda. *Journal of Library, Archival and Information Science* 12.2:145-154.
- Mamafha T.M.M. (2013). Utilization of information and communication technologies in public libraries at Ekurhu-leni Metropolitan Municipality, South Africa. Master's thesis. Pretoria: University of South Africa.
- Nwachukwu, V.N. (2004). Information technology application to libraries in developing countries: The need for caution. *Global Review of Library and Information Science* (1):94-99
- Nwezeh, C. M. T. (2010). Information and Communication Technologies for educational development: the Case of cyber cafes at Obafemi Awolowo University, Ile-Ife, Nigerian. *Library Philosophy and Practice* <http://www.webpages.udidaho.edu/~mbolon/nwezeh2.htm>
- Ogunbote, K.O. & Odunewu, A.O. (2009). Library, information and communication technology use in teaching non-regular students in Nigeria universities. *An International Journal: The information Technologist* 6(1)69-76
- Oketunji, I. (2004). Library development and the role of information and communication technologies. A paper presented at National workshop on strategies for managing technical services in libraries and information centres. NLA cataloguing, classification, and indexing section, held at Stella Obasanjo library Complex Lokoja; 17-24 October. 13p
- Okezie, O.I. (2009). Extent of ICT use in research by lecturers in the social sciences in university of Portharcout Unpublished MLS Project, University of Nigeria, Nsukka
- Okiy, R.B. (2005). Nigerian University Libraries and the challenges of information provision in the 21<sup>st</sup> century. *Library bulleting*, 3(1&2)23.
- Okore, M.A. (2005). The challenges of ICT for Nigeria Academic Libraries. *Global Review of Library and Information Science*. 1(1):84-93
- Omekwu C. & Eruvwe U., (2014). Application of information and communication technology (ICT) in Delta State Polytechnic Libraries, Nigeria. *Journal of Applied Information Science and Technology*, 7 (1): 46-60
- Rosenberg, D. (2005). Resource sharing: Is it the answer for Africa? *African Journal of Library, Archives, and Information Science* 3 (2): 107-112
- Vishala, B. K., & Bhandi, M. K. (2009). Advantages and disadvantages of e-journals as perceived by the academicians of universities of Karnataka: A survey report. *SRELS Journal of Information Management*, 46(3): 229-238
- Waganjo, W. J. (2006) The Camel comes of Age: Academic and Public Libraries partnership in Sharing Information through Technology in Kenya – the role of the African Virtual Library Project <http://www.ala.org/lala/iro/iroactivities/camelcomesofage.htm>.